Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TUBERCULOSIS AND CLIMATE.

BY

ROBERT DeC. WARD.

There is no more important subject on the border-land between medicine and climatology than that which concerns the climatic treatment of tuberculosis. In a recent paper, entitled "The Action of a High Dry Climate in the Cure of Tuberculosis" (*Bull.* Univ. New Mex., Whole No. 47, Biol. Ser., Vol. III, Art. 13, June, 1908), Dr. John Weinzirl advances a new theory regarding the value of a high dry climate in the cure of tuberculosis. The author summarizes the various explanations which have been given to account for the favourable action of these climates, and shows why these explanations seem to him inadequate.

It has generally been assumed that mountain climates, by leading to enlarged lung capacity and increased respiration, result beneficially for the patient. Dr. Weinzirl believes that it is doubtful whether any material increase takes place. The highly ozonized air of high altitudes has been thought by some of hygienic importance, but the author points out that this hypothesis has not been substantiated by facts, the ozone in high dry climates being small in amount. A generally accepted assumption is that dry air assists in drying up and curing lesions in the lungs, but Dr. Weinzirl calls attention to the fact that the air in the lungs is saturated with water vapour in all climates, and that the nature of the tuberculosis lesions in the lungs precludes the possibility of any considerable desiccation taking place.

Some authorities have assumed that the sparse population and the pure, fresh air are of essential importance. As the air in forests and over open prairies is often equally pure, this factor is not considered distinctive for the benefit noted in high dry climates. The increased amount of sunlight, especially the increase in blue, violet and ultra-violet rays, which has been held to be the beneficial factor, is found not to be of undoubted help. Another hypothesis is that a high dry climate affords greater opportunities for out-door life and exercise, the real benefit being due to one or more of the causes previously noted. This, again, does not seem to Dr. Weinzirl to offer any adequate or satisfactory explanation.

It is the conclusion of the author that the action of a high dry climate in the cure of tuberculosis consists essentially in the stimulation afforded to the body by the daily variation in temperature; altitude, dryness, and sunlight are important mainly as being instrumental in causing this daily variation. These factors by themselves exercise a certain hygienic influence, but the temperature change produces a true physiological reaction. Incidentally, the variation in temperature affords cool nights, with accompanying refreshing sleep. Together these two factors afford the patient a vantage ground from which to wage a more successful combat against the forces of the disease.

It is obvious that, in view of the complex series of elements which unite in producing climate, it is unlikely that any one particular factor is the really essential thing in the climatic treatment of tuberculosis. The beneficial results which have attended the treatment of the disease in mountain climates, especially in dry regions, have doubtless come from the remarkable combination of elements which is embraced, in the minds of climatologists, in the term "mountain climates." To attempt to pick out one, or two, of these elements as being of the greatest importance will seem to most uninitiated persons as unlikely to lead to any absolutely convincing results.

MYLIUS-ERICHSEN'S MAP OF NORTH-EAST GREENLAND.

The map here printed is based upon the survey of the northeast coast of Greenland by Dr. Mylius-Erichsen, which appears in *Ymer* of the Swedish Anthropological and Geographical Society (No. 3, 1908). The map shows how widely the coast differs from our earlier conceptions of it. The broken line extending from Lambert Land northwest to Cape Glacier shows the supposed general direction of the unexplored part of the Greenland coast, as hitherto represented on the maps. It was believed that its trend was in a general northwest direction from Lambert Land to the Independence Bay of Peary. The fact is that the coast, following its indentations, extends for about 300 miles in a general northeasterly direction till its most eastern point nearly touches 12° W. longitude from Greenwich. We now know that about 1,000 miles of tortuous coast line stretches between Cape Bismarck, the highest point